

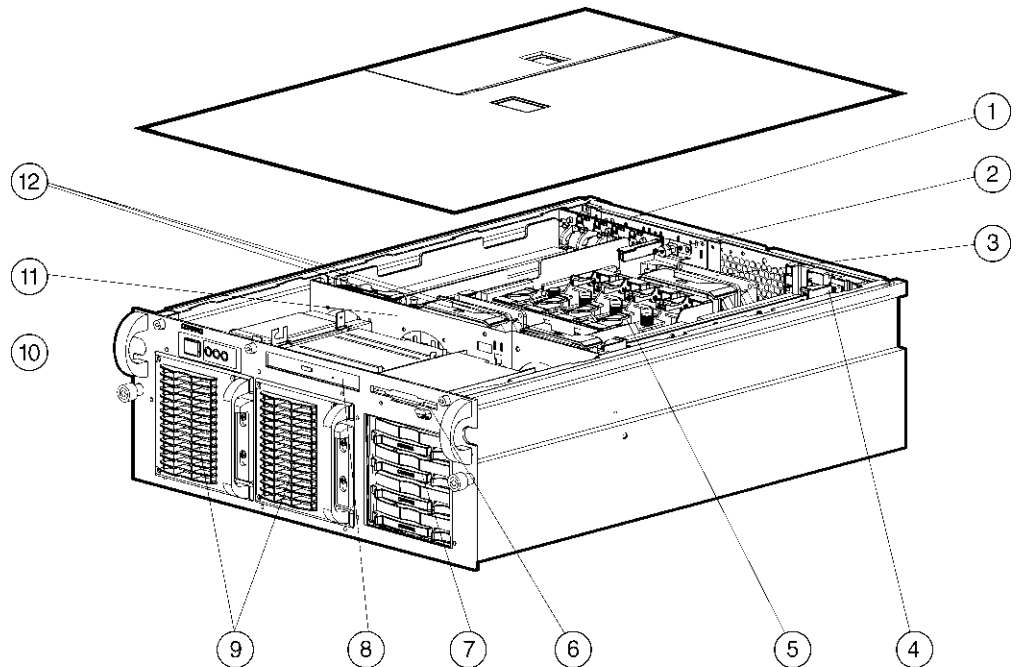
Overview

WHAT'S NEW

- Intel Pentium® III Xeon™ 700 MHz Processors (up to 4) with 1-MB, or 2-MB L2 Cache
- ServerWorks Enterprise ServerSet™ III HE chipset
- 512 MB PC100 Advanced ECC SDRAM Memory standard, expandable to 16 GB (Advanced ECC Memory Technology – data protection in the event of an SDRAM component failure)
- Integrated Smart Array Controller
- Compaq NC3134 Fast Ethernet NIC 64 PCI Dual Base 10/100 (upgradable to Gigabit)
- 64-bit/66-MHz slots for 64-bit/66-MHz expansion card support
- Improved Serviceability and Intelligent Manageability

AT A GLANCE

- Rack optimized (4U = 7") 4-way computing power for your data center or ISP/ASP environments
- Six PCI slots, 4 Hot Pluggable:
 - 2 64-bit/66-MHz Hot Plug
 - 2 64-bit/33-MHz Hot Plug
 - 1 64-bit/33-MHz Non-Hot Plug
 - 1 32-bit/33-MHz Non-Hot Plug
- Standard Wide Ultra2/Ultra3-ready Drive Cage (4 x 1")
- Internal Hot Plug Drive Storage of up to 145.6 GB with 36.4-GB 1" Wide Ultra2/Ultra3 hard drives
- Uncompromising reliability features:
 - Industry-Standard PCI Hot Plug with push button functionality
 - 7 x 24 cooling provided by 8 Hot Plug Redundant System Fans
 - Hot Plug 450-Watt Power Supply with optional redundant hot plug power supplies
- Automatic Server Recovery 2 (ASR-2), Integrated Remote Console (IRC), Compaq Insight Manager and SmartStart
- Toolless internal design for easy access to system components
- Protected by Compaq Services, including a limited three-year parts, labor and on-site warranty with optional four hour response. Pre-Failure Warranty and Compaq Service and Support Programs available on a Worldwide basis — Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center at 1-800-345-1518 for details. In Canada, consult the Product Information Center at 1-800-567-1616 for details.



- | | |
|---|---|
| 1. Six PCI I/O Slots (Two 66-MHz, 4 hot plug) | 7. 4 x 1" Wide Ultra2/Ultra3 Drive Cage |
| 2. Peripheral Board | 8. High Speed IDE CD-ROM |
| 3. Redundant Hot Plug Fan | 9. Power Supplies (2 shown above, 700-MHz Models ship standard with one Power Supply) |
| 4. Memory Board | 10. Front Panel LED Display |
| 5. Processors (up to 4 supported) | 11. Removable Center Wall |
| 6. 1.44-MB Diskette Drive | 12. Additional Hot Plug Redundant Fans |

QUICKSPECS

Compaq *ProLiant* DL580

Standard Features

MODELS

Compaq *ProLiant*™ DL580

Available in multiple configurations

Processor

Intel Pentium III Xeon processor 700 MHz
(Note: One or two processors ship standard depending on Model)

Cache Memory – One of the following:

2-MB level 2 writeback cache per processor standard
1-MB level 2 writeback cache per processor standard

Upgradability

Upgradable to quad processing
Support for future processor upgrades

Memory

Standard 512 MB (PC100-MHz Advanced ECC SDRAM memory)
Maximum 16 GB

Note: Advanced ECC Memory Technology protects the data even in the event of an entire SDRAM component failure. Embedded in the chipset design, this feature allows the use of Industry-Standard Registered DIMMs.

Network Controller

Compaq NC3134 Fast Ethernet NIC 64 PCI Dual Base 10/100 (upgradable to Gigabit)

Expansion Slots

I/O (Total)	6, 5 available
64-bit/66-MHz PCI Hot Plug	2, 1 available
64-bit/33-MHz PCI Hot Plug	2, 2 available
64-bit/33-MHz PCI Non-Hot Plug	1, 1 available
32-bit/33-MHz PCI Non-Hot Plug	1, 1 available

Storage Controller

Integrated Smart Array Controller (supports Internal RAID 0, 1, 0+1, 5 and external tape devices)

Storage

Diskette Drives	1.44 MB
CD-ROM	High Speed IDE CD-ROM Drive (slim line)
Hard Drives	None
Maximum Internal Storage	145.6 GB (4 x 36.4 GB 1" drives) (internal hot plug drive cage)

Interfaces

Parallel	1
Serial	1 (Note: You can configure a second serial device to your ProLiant DL580 server by installing the auxiliary serial connector that ships with the server. The auxiliary connector attaches to a serial port B on the peripheral board and exits the rear of the server through the auxiliary serial knockout located directly above the redundant power feeds.)
Pointing Device (Mouse)	1
Graphics	1
Hot Plug Keyboard	1
External Wide Ultra2 SCSI	1
Network RJ-45	2

Graphics

Integrated 1280 x 1024, 256 color on PCI local bus, 2-MB video memory

Form Factor

Rack (4U = 7"), ships with sliding rails and cable management

Standard Features

Compaq Software

Compaq <i>Insight Manager</i> ™	The comprehensive system management tool that monitors the operation of Compaq servers, workstations and clients
Compaq <i>SmartStart</i> ™	The server configuration and software integration tool from Compaq
Array Configuration Utility (ACU) with Smart Array Controllers	Same easy to use yet powerful graphical user interface (GUI) configuration utility and easy to navigate wizards for all Smart Array Controllers

Intelligent Manageability

Compaq Remote Insight Lights Out Edition support
 Automatic Server Recovery-2 (ASR-2)
 Compaq Insight Manager
 Integrated Remote Console-IRC (with an internal modem)
 Integrated Management Log (IML)
 Server Health logging
 Off-Line Backup Processor capability
 Dynamic sector repairing and drive parameter tracking (with Smart Array controllers)
 Redundant/adaptive load balancing NIC Support

Availability

PCI Hot Plug with push button functionality
 7 x 24 cooling provided by 8 Hot Plug Redundant System Fans
 Integrated Smart Array Controller for RAID data protection/performance and maximum data bandwidth
 Advanced Error Checking and Correcting (ECC) SDRAM Technology
 Hot Plug Ultra2/Ultra3 Drive Bays
 Redundant Hot Plug Power Supplies (optional)
 Redundant NIC support
 Pre-Failure Warranty (covers processors, hard drives, and memory)

Serviceability

Internal Diagnostics Display (IDD) indicates specific DIMM or processor failure
 LED display on front panel indicates interlock, fan, and power failures
 Spring-loaded memory board release latches prevent unseating incidents
 PCI Card Guide holds long PCI cards in place during transit
 Customer driven interior system fan design (all system fans interior to chassis)
 Removable, internal center panel eases access to the power supply and hard drive backplane boards
 Optional High Voltage PDU cable exits chassis at a right angle to simplify cable management at rear of chassis

Security

Power-on password
 Hot plug keyboard password
 Diskette drive control
 Diskette boot control
 Network Server Mode
 Security Provision
 Parallel and serial interface control
 Administrator's password
 Disk configuration lock
 Hot plug access security

Standard Features

Power Supply

One 450-Watt Hot Plug Power Supply (optional Redundant Hot Plug Power Supply Option Kit)

Required Cabling

For required cabling information, refer to the Compaq web site at <http://www.compaq.com/products/servers/proliantDL580/>.

Note: This web site available in English only.

OS Support

Microsoft Windows NT Server

Microsoft Windows 2000

Novell NetWare

SCO OpenServer

SCO UnixWare

IBM OS/2 Warp Family

LINUX (RedHat, S.U.S.E., TurboLinux Server, Caldera eServer)

Sun Solaris Intel Platform Edition

Banyan VINES

Note: For a more complete and up-to-date listing of supported OS's and versions, please visit our OS Support Matrix at: <ftp://ftp.compaq.com/pub/products/servers/os-support-matrix-310.pdf>.

Note: For an up-to-date listing of the latest drivers available for the Compaq ProLiant DL580, please see:

<http://www.compaq.com/support/files/server/us/index.html>.

Please note these web sites are available in English only.

Service and Support

Compaq Services provides a wide range of service offerings, including a three-year, limited warranty that is fully supported by a worldwide network of resellers and service providers, lifetime toll-free 7 x 24 hardware technical phone support and Pre-Failure Warranty coverage of hard drives, memory and processors. Disaster recovery services are available through partnership with Comdisco.

Note: Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center at 1-800-345-1518 for details. In Canada, consult the Product Information Center at 1-800-567-1616 for details.

QUICKSPECS

Compaq *ProLiant* DL580

Standard Features

**DL580R01 X700-2MB,
512MB (2P)**
155618-001

Models

Processor(s)	(2) Intel Pentium III Xeon 700 MHz processors	Network Controller	Compaq NC3134 Fast Ethernet NIC 64 PCI Dual Base 10/100
Cache Memory	2-MB Level 2 writeback cache per processor	Storage Controller	Integrated Smart Array Controller
Memory		Hard Drive	None
Standard	512 MB	Internal Storage	145.6 GB maximum
Maximum	16 GB	Optical Drive	High Speed IDE CD-ROM Drive
		Form Factor	Rack 4U

**DL580R01 X700-1MB,
512MB (1P)**
155617-001

Processor(s)	(1) Intel Pentium III Xeon 700 MHz	Network Controller	Compaq NC3134 Fast Ethernet NIC 64 PCI Dual Base 10/100
Cache Memory	1-MB Level 2 writeback cache per processor	Storage Controller	Integrated Smart Array Controller
Memory		Hard Drive	None
Standard	512 MB	Internal Storage	145.6 GB maximum
Maximum	16 GB	Optical Drive	High Speed IDE CD-ROM Drive
		Form Factor	Rack 4U

Options

Processor

Pentium III Xeon X7002MB Processor Option Kit	174449-B21
Pentium III Xeon X700-1MB Processor Option Kit	174448-B21

Note: The increasing power of new high-performance processor technology requires increased cooling efficiency for rack-mounted servers. The new Compaq Rack 9000 series (120663-xx1 (42U), 120664-xx1 (36U), 120665-xx1 (22U)) provides enhanced airflow for maximum cooling, allowing these racks to be fully loaded with servers using the latest processors.

When installing a server with Pentium III Xeon processors running at speeds of 550 MHz or greater in Compaq Rack 7000 series racks (165753-xx1 (42U), and 163747-xx1 (22U)), the new processor technology requires the installation of Compaq's new High Airflow Rack Door Insert (327281-B21 (42U) or 157847-B21 (22U)).

Memory

4096-MB PC100 Advanced ECC SDRAM Memory Kit (4 x 1024 MB)	189083-B21
2048-MB PC100 Advanced ECC SDRAM Memory Kit (4 x 512 MB)	189082-B21
1024-MB PC100 Advanced ECC SDRAM Memory Kit (4 x 256 MB)	189081-B21
512-MB PC100 Advanced ECC SDRAM Memory Kit (4 x 128 MB)	189080-B21

Hard Drives

Wide Ultra3 SCSI – Universal Hot Plug

36.4-GB Wide Ultra3 SCSI 10,000 rpm Drive (1")	176496-B22
18.2-GB Wide Ultra3 SCSI 10,000 rpm Drive (1")	142673-B22
9.1-GB Wide Ultra3 SCSI 10,000 rpm Drive (1")	142671-B22
18.2-GB Wide Ultra3 SCSI 15,000 rpm Drive (1")	188122-B22
9.1-GB Wide Ultra3 SCSI 15,000 rpm Drive (1")	188120-B22

Note: Wide Ultra3 SCSI drives require the purchase and installation of Wide Ultra3 Controllers or Adapters to run at Wide Ultra3 speeds.

Wide Ultra2 SCSI – Universal Hot Plug

18.2-GB Wide Ultra2 SCSI Drive (1")	388144-B22
9.1-GB Wide Ultra2 SCSI Drive (1")	123065-B22

Storage Controllers

Smart Array 431 Controller	127695-B21
Smart Array 3200 Controller	295643-B21
Smart Array 4200 Controller	295636-B21
Smart Array 5302/32 Controller	166207-B21
Smart Array 5302/64 Controller	124992-B21
Smart Array 5304/128 Controller	158939-B21
Ultra3 Channel Expansion Module for Smart Array 5300 Controller	153507-B21
64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter	154457-B21
64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter	129803-B21

Communications

Compaq NC3123 Fast Ethernet NIC PCI 10/100 WOL	174830-B21
Compaq NC3122 Fast Ethernet NIC PCI Dual 10/100	317450-B21
Compaq NC3134 Fast Ethernet NIC 64 PCI Dual Port 10/100	138603-B21
Compaq NC3135 Fast Ethernet Module Dual 10/100 Upgrade Module for NC3134 and NC3131	138604-B21
Compaq NC6132 Gigabit Module 1000 SX Upgrade Module for NC3134 and NC3131	338456-B23
Compaq NC6133 Gigabit Module 1000 LX Upgrade Module for NC3134 and NC3131	338456-B24
Compaq NC3133 Fast Ethernet Module 100 FX Upgrade Module for NC3134 and NC3131	338456-B25
Compaq NC6134 Gigabit NIC 64 PCI 1000 SX	174818-B21
Compaq NC4621 Token Ring NIC PCI 4/16 WOL	379956-B21
IBM 16/4 Token Ring PCI Special	133749-B21

Options

Communications *(continued)*

ServerNet PCI Adapter	309833-B22
4M Cable	309834-B23
30M Cable	309834-B22
ServerNet II PCI Adapter Card Kit	174736-B21
ServerNet II 12-Port Copper Serial Switch Kit	174739-001
ServerNet II 5-meter Copper Serial Cable Kit	174737-B21
ServerNet II 10-meter Copper Serial Cable Kit	174738-B22

Redundant Options

Compaq Hot Plug Redundant Power Supply Option Kit	105739-001
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Management Options

Compaq Remote Insight (PCI) LAN + NA Modem	294013-002
Compaq Remote Insight Board (PCI) LAN/Serial without modem	294013-B24
Compaq Remote Insight Board (PCI) LAN only	294013-B25
Compaq Remote Insight Lights-Out Edition	157866-001

Monitors

TFT5010 15" Flat Panel Monitor (Opal)	104741-001
TFT5010 15" Flat Panel Monitor (Carbon)	154486-001
TFT5005 15" Flat Panel Monitor (Opal)	201431-001
TFT5005 15" Flat Panel Monitor (Carbon)	201430-001
TFT5000R Flat Panel	120207-001
P700 Color 17 Monitor	380207-001
V710 Color 17 Monitor (opal)	187895-001
V500 Color 15 Monitor	325900-001
S510 Color Monitor	168636-001
S710 Color 17 Monitor	152991-001

CRT Code Key

Dash #	Description
-001	NA Kit with US Power Cord
-002	Carbon model with US Power Cord
-003	Touch Screen model with US Power Cord
-004	NAFTA model with US Power Cord (Made in Mexico)
-005	NA Kit with Powered Speakers
-006	GSA model with US Power Cord
-007	NH MPR model with US power cord (Made in Mexico)
-B24	TCO model without power cord (Digital Classic)
Note: All models above are NH	

Options

External Tape Drives **(Note: Only External Tape Drives supported by the ProLiant DL580)**

External 20/40-GB DAT DDS-4 Tape Drive	157770-001
20/40-GB DAT 8 Cassette Autoloader External	166505-001
External 40/80-GB DLT Drive	146197-B21
External 35/70-GB DLT Drive	242521-B21
External 20/40-GB DLT Drive (Opal)	340744-B22
External AIT 50-GB Tape Drive	157767-001
External AIT 35-GB Tape Drive	388507-001
DDS-4 Media (10 pack)	152842-001
20/40-GB DAT 8 Cassette Magazine with Media	171532-B21
12-GB DDS-3 DAT Cassette (10 Pack)	295515-B21
DAT Cleaning Cassette	242781-001
AIT 35-GB Data Cassette (five pack)	402371-B21
AIT 50-GB Data Cassette (five pack)	152841-001
DLT IV Drive Cartridge (single)	295194-B21
DLT IV Drive Cartridge (seven pack)	295192-B21
DLT Cleaning Cartridge	199704-001

Note: Please see the Compaq 20/40-GB DAT Drive, Compaq 20/40-GB DAT DDS-4 8 Cassette Autoloader, Compaq 40/80-GB DLT Drive, Compaq 35/70-GB DLT Drive, Compaq 20/40-GB DLT Drive, Compaq AIT 50-GB Tape Drive, or the Compaq AIT 35-GB Tape Drive for an up-to-date listing of the latest O/S Support details, please see the following:

http://www.compaq.com/products/quickspecs/North_America/10233_na.html

Please note this web site is available in English only.

Options

External Storage - Rack

Compaq StorageWorks Enclosure Model 4214R (rack-mountable)	103381-001
Compaq StorageWorks Enclosure Model 4254R (rack-mountable)	138151-001
Compaq StorageWorks Enclosure Model 4314R (rack-mountable)	190209-001
Compaq StorageWorks Enclosure Model 4354R (rack-mountable)	190211-001
Note: The Compaq StorageWorks Enclosure 4200/4300 Family support the Wide Ultra2/Ultra3 1" Hot Plug Hard Drives.	
Rack-Mountable SCSI Storage Expander II	332607-001
Rack-Mountable ProLiant Storage System Model UE	348700-001
Rack-Mountable ProLiant Storage System Model U2	304100-B22
Note: The Compaq ProLiant Storage System Models UE and U2 support the Wide-Ultra SCSI-3 Drives.	
ProLiant Storage System /U Redundant Power Supply	224206-001
StorageWorks Enclosure 4200 Redundant Power Supply Option	119826-B21
StorageWorks Enclosure 4200 Ultra2 Dual Bus I/O Module Option	119829-B21
StorageWorks Enclosure 4200 Ultra3 Single Bus I/O Module Option	190212-B21
StorageWorks Enclosure 4200 Ultra3 Dual Bus I/O Module Option	190213-B21
StorageWorks Enclosure Tower to Rack Conversion Kit	150213-B21

Options

StorageWorks DLT Departmental Library

TL895 (96 slot) library unit, 2 drive	349350-B22
TL895 (96 slot) library unit, 3 drive	349350-B23
TL895 (96 slot) library unit, 4 drive	349350-B24
TL895 (96 slot) library unit, 5 drive	349350-B25
TL895 (96 slot) library unit, 6 drive	349350-B26
TL895 (96 slot) library unit, 7 drive	349350-B27
TL891 DLT library unit, 1 drive Rack, FWD	120876-B21
TL891 DLT library unit, 2 drive Rack, FWD	120876-B22
TL881 DLT Library, 1 drive Rack, FWD	128669-B21
TL881 DLT Library, 2 drive Rack, FWD	128669-B22
Add-On 20/40-GB Drive for TL881	128671-B21
Add-On 35/70-GB Drive for TL891	120878-B21
DLT7000 drive upgrade kit	349351-B21
Note: Available for TL895 DLT Library only.	
MiniLibrary Data Unit	128670-B21
Note: Available for TL881, TL891 DLT Libraries only.	
MiniLibrary Expansion Unit	120877-B21
Note: Available for TL881, TL891 DLT Libraries only.	
StorageWorks Dual Channel Ultra-Wide Differential Library Host Bus Adapter	157229-B21
Note: The StorageWorks Dual Channel Ultra-Wide Differential Library Host Bus Adapter is required to support FWD-based tape libraries.	
DLT IV Data Cartridges (single pack)	295194-B21
DLT IV Data Cartridges (7 pack)	295192-B21
DLT Cleaning Cartridge	199704-001
MiniLibrary pass-through Mechanism Kit	120880-B21
Note: Available for TL881, TL891 DLT Libraries only.	
10 Slot Magazine	120881-B21
Note: Available for TL881, TL891 DLT Libraries only.	
MiniLibrary Table Top to Rack Mount Conversion Kit, Metric/RETMA racks	120882-B21
Note: Available for TL881, TL891 DLT Libraries only.	
MiniLibrary Table Top to Rack Mount Conversion Kit, Compaq racks	120883-B21
Note: Available for TL881, TL891 DLT Libraries only.	
Note: Please see the TL881, TL891, or the TL895 Automated DLT Tape Library Solution QuickSpecs for additional information including Upgrade Kits, Accessories, ProLiant Connectivity Kits, Host Bus Adapters, SCSI Cable Kits, and Localization Kits and additional options needed for a complete solution at: http://www.compaq.com/products/quickspecs/North_America/10233_na.html Please note this web site is available in English only.	

Options

Automated AIT Tape Library Solution

SSL2020 AIT Mini-Library 1 drive, 20 slot Rackmount	175196-B21
SSL2020 AIT Mini-Library 2 drive, 20 slot Rackmount	175196-B22
SSL2020 AIT Library Pass Thru with Transport	175312-B21
SSL2020 AIT Library Pass Thru Extender	175312-B22
AIT 50GB Drive Add-On LVD Drive for SSL2020 AIT Library	175197-B21
19 Slot Magazine for SSL2020 AIT Library	175198-B21
AIT 50-GB Data Cassette (5 pack)	152841-001
AIT Cleaning Cassette	402374-B21
Tabletop to Rackmount Upgrade Kit for SSL2020 AIT Library, Compaq Rack	175199-B21
Tabletop to Rackmount Upgrade Kit for SSL2020 AIT Library, RETMA racks	175199-B22

Note: Please see the AIT Automated DLT Tape Library Solution QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at: http://www.compaq.com/products/quickspecs/North_America/10233_na.html
Please note this web site is available in English only.

Tape Array Solution

TA1000 AIT Tape Array, Rackmount	175005-001
AIT 50-GB Data Cassette (5 pack)	152841-001
AIT Cleaning Cassette	402374-B21
DLT Tape Array III Model 40/80-4	161140-001
DLT Tape Array III Model 0	168047-001
DLT Tape Array Model 0	199860-001
DLT Tape Array II Model 35/70-4 no software	295165-001
DLT IV Data Cartridges (single pack)	295194-B21
DLT IV Data Cartridges (7 pack)	295192-B21
DLT Cleaning Cartridge	199704-001
DLT Library Tabletop Conversion Kit	350384-B21
Tape Array Cable Kit	242427-001
DLT Tape Array III Model 0, LVD Cable Kit	168048-B21

Note: Available for the DLT Tape Array and DLT Tape Array II only.

Note: Available for the DLT Tape Array III Model.

Note: Please see the Compaq TA1000 AIT Tape Array, Compaq DLT Tape Array III, or the Compaq DLT Tape Array II QuickSpecs for additional information including Tape Drives, Cartridges, Controllers, and SCSI Cables and additional options needed for a complete solution at: http://www.compaq.com/products/quickspecs/North_America/10233_na.html
Please note this web site is available in English only.

Options

StorageWorks Enterprise Tape Library

ESL9236D Enterprise Library 6 35/70 Drive	146205-B23
ESL9236D Enterprise Library 8 35/70 Drive	146205-B24
ESL9236D Enterprise Library 10 35/70 Drive	146205-B25
ESL9236D Enterprise Library 12 35/70 Drive	146205-B26
ESL9236D Enterprise Library 14 35/70 Drive	146205-B27
ESL9236D Enterprise Library 16 35/70 Drive	146205-B28
Library Ready 35/80GB DLT Hot-Swap Drive for ESL9326D	146209-B21
ESL 9000 Pass Through Kit for Multi User Connectivity	161268-B21
StorageWorks Dual Channel Ultra-Wide Differential Library Host Bus Adapter	157229-B21
Note: The StorageWorks Dual Channel Ultra-Wide Differential Library Host Bus Adapter is required to support the ESL9236D Library.	
DLT IV Data Cartridges (single pack)	295194-B21
DLT IV Data Cartridges (7 pack)	295192-B21
DLT Cleaning Cartridge	199704-001

Note: Please see the Compaq StorageWorks Enterprise Backup Solution QuickSpecs for additional information including Tape Drives, Cartridges, Controllers, and SCSI Cables and additional options needed for a complete solution at:
http://www.compaq.com/products/quickspecs/North_America/10233_na.html
 Please note this web site is available in English only.

StorageWorks RAID Array 4100

StorageWorks Raid Array 4100 (rack)	146013-001
Fibre Channel Storage Hub 12	295573-001
Fibre Channel Storage Hub 7	234453-001
Compaq Storage Hub 7 Universal Rack Mount Kit	136127-B21
Fibre Channel Storage Hub – 12 Port with 41U/42U Bracket	295573-B22
Compaq Storage Hub 12 Management Option	159262-B21
StorageWorks Raid Array 4000 Redundant Array Controller	223187-B21
StorageWorks Fibre Channel Arbitrated Loop Switch 8	177862-B21
StorageWorks Fibre Channel Arbitrated Loop 3-Port Expansion Module	177863-B21
64-bit/66MHz Fibre Channel Host Adapter	120186-B21
Fibre Channel Host Adapter Redundancy Kit	174681-B21
GBIC-SW Connector Kit (two each)	234459-B21
GBIC-LW Connector Kit (two each)	340412-B21
Fibre Channel Connection Kit, 3 SW GBICS, 2 Cables	380579-B21
Fibre Channel Connection Kit, 2 SW GBICS, 2 Cables	380596-B21
Fibre Channel short-wave GBIC	380561-B21
Fibre Channel long-wave GBIC	127508-B21
2m Multi-Mode Fibre Channel Cable	234457-B21
5m Multi-Mode Fibre Channel Cable	234457-B22
15m Multi-Mode Fibre Channel Cable	234457-B23

Options

StorageWorks RAID Array 4000 *(continued)*

30m Multi-Mode Fibre Channel Cable	234457-B24
50m Multi-Mode Fibre Channel Cable	234457-B25
Raid Array 4000 Redundant Power Supply	224206-001
Raid Array 4000 Tower to Rack Conversion Kit	297162-B21
Raid Array 4100 Rack to Tower Conversion Kit	154253-B21
Upgrade Kit for ProLiant Storage System F and F1	296324-B21
Fibre Channel Array Controller 64-MB Cache Upgrade Kit	262398-B21
Raid Array 4100 Rack to Tower Conversion Kit	154253-B21
Fibre Channel Troubleshooting Kit	234468-B21

RAID Array 8000

Departmental Pedestal Models

RA8000 FC Single Controller (Opal)	400553-B22
RA8000 FC Dual Controller (Opal)	400552-B22
Expansion Cabinet 24-slot (Opal)	380570-B22

Rack Mountable Models

RA8000 FC Single Controller	400554-B21
RA8000 FC Dual Controller	400700-B21
Expansion Cabinet 24-slot	380568-B21

Note: Please see the Compaq StorageWorks Fibre Channel RAID Array 8000, ESA12000 QuickSpecs for FC Hubs, FC switches, platform software, host adapters, disks and options for complete solutions at:
http://www.compaq.com/products/quickspecs/North_America/10418_na.html
 Please note this web site is available in English only.

Enterprise Storage Array 12000

ESA Building Blocks

High-capacity/General Business – Dual Controllers 48 slots, 60 Hz (Opal)	400557-002
High bandwidth Quad controllers 48 slots, 60 Hz (Opal)	400555-002
Single expansion Dual controllers 24 slots, 25U extra cabinet space, 60 Hz (Opal)	400559-002
Expansion enclosure 48 slots, 60 Hz (Opal)	380640-002

Note: Please see the Compaq StorageWorks Fibre Channel RAID Array 8000, ESA12000 QuickSpecs for FC Hubs, FC switches, platform software, host adapters, disks and options for complete solutions at:
http://www.compaq.com/products/quickspecs/North_America/10418_na.html
 Please note this web site is available in English only.

StorageWorks Modular Array 6000

MA6000 D14	187738-B21
MA6000 S14	187739-B21

Note: Please see the Compaq StorageWorks MA6000 QuickSpecs for FC Hubs, FC switches, platform software, host adapters, disks and options for complete solutions at:
http://www.compaq.com/products/quickspecs/North_America/10418_na.html
 Please note this web site is available in English only.

Options

StorageWorks Modular Array 8000/Enterprise Modular Array 12000

EMA12000 D14 60 Hz	175990-B21
EMA12000 S14 60 Hz	175991-B21
MA8000 60 Hz	175992-B21
EMA12000 Blue 60 Hz	175993-B21

Note: Options include controller, solution kits, ACS. MA8000/EMA12000 includes controller shelf, drive shelves and cabinet. Packaging upgrade to RA8000/ESA12000.

Note: Please see the Compaq StorageWorks MA8000/EMA12000 QuickSpecs for FC Hubs, FC switches, platform software, host adapters, disks and options for complete solutions at:

http://www.compaq.com/products/quickspecs/North_America/10418_na.html

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StorageWorks Options

Fibre Channel Tape Controller – II	152975-001
Fibre Channel Storage Switch 16	380578-B21
Fibre Channel Storage Switch 8	380591-B21
Fibre Channel SAN Switch/8 with Fabric Operating Software	158222-B21
Fibre Channel SAN Switch/16 with Fabric Operating Software	158223-B21
F200 Clustering Kit	380357-B21

Uninterruptible Power Systems – Rack

Rack-Mountable UPS R1500 (100 to 127 VAC)	242704-001
Rack-Mountable UPS R3000 (100 to 127 VAC)	242705-001
Rack-Mountable UPS R3000h-NA (208 to 240 VAC) NDC (non-detached cord)	242705-003
Compaq UPS R3000 XR (120V)	192186-001
Compaq UPS R3000 XR (208V)	192186-002
Rack-Mountable UPS R6000 (208V)	347207-001
R6000 Extended Runtime Module	347224-B21
Note: Available for the UPS R6000 Models only.	
Extended Runtime Battery, R3000 XR	192188-B21
Note: Available for the UPS R3000 XR Models only.	
Six-Port Card	192185-B21
Note: Available for the UPS R3000 XR Models only.	
SNMP/Serial Port Card	192189-B21
Note: Available for the UPS R3000 XR Models only.	
SNMP-EN Adapter	347225-B21
High to Low Voltage Transformer (250VA)	388643-B21
Multi-Server UPS Card	123508-B21
Scalable UPS Card	123509-B21

Please see the Compaq Rack Builder for configuration assistance at

www.compaq.com/products/storageworks/rack_accessories/rackbuilderpro2.html.

Please note this web site is available in English only.

Compaq Rack 9000 Series (Opal)

Compaq Rack 9142 (42U) – Pallet	120663-B21
Compaq Rack 9142 (42U) – Shock Pallet	120663-B22
Compaq Rack 9142 (42U) – Crated	120663-B23
Compaq Rack 9136 (36U) – Pallet	120664-B21
Compaq Rack 9136 (36U) – Shock Pallet	120664-B22
Compaq Rack 9136 (36U) – Crated	120664-B23
Compaq Rack 9122 (22U) – Pallet	120665-B21

Options

Compaq Rack 9000 Series (Opal) *(continued)*

Compaq Rack 9122 (22U) – Shock Pallet	120665-B22
Compaq Rack 9122 (22U) – Crated	120665-B23

Note:

- B22 part numbers are used to ship configured racks (by custom systems, VARs and Channels)
- B23 part numbers are used for air shipments

Rack Options for Compaq Rack 9000 Series

Baying/Coupling Kit	120669-B21
Rack 9142 Side Panel	120670-B21
Rack 9136 Side Panel	120671-B21
Ballast Option Kit	120672-B21
Stabilizer Option Kit	120673-B21
Rack Rail Adapter Kit (25" depth)	120675-B21
Fan (110 VAC) Roof Mount	120677-B21
Fan (220 VAC) Roof Mount	120678-B21
9142 Extension Kit	120679-B21
Grounding Rack Option Kit	120682-B21
Cable Management D-Rings Kit	168233-B21
Rack Blanking Panels (1U)	189453-B21
Rack Blanking Panels (2U)	189453-B22
Rack Blanking Panels (3U)	189453-B23
Rack Blanking Panels (4U)	189453-B24
Rack Blanking Panels (5U)	189453-B25

Rack Options for Compaq Rack 7000 Series

Rack Sidewall Kit (42U only)	165652-001
Coupling Kit (42U only)	165664-001
Stabilizing Feet (42U only)	189907-001
High Air Flow Rack Door Insert for 7122	157847-B21
High Air Flow Rack Door Insert for 7142	327281-B21
High Air Flow Rack Door Insert for 7142 (six pack)	327281-B22
Compaq Rack Extension Kit for 7142	154392-B21

Options

Rack Options for Compaq Rack 7000 and 9000 Series

Sliding Shelf Kit	332564-B21
Monitor Utility Shelf	303606-B21
Rack Blanking Panel Kit for Rack 7000 series (Beach Gray)	169940-001
Rack Blanking Panel Kit for Rack 9000 series(Opal)	169940-B21
Compaq Networking Cable Management Kit	292407-B21
Compaq Networking Recessed Rail Management Kit	292406-B21
Compaq Power Distribution Unit-24A Low Voltage PDU	295363-001
Compaq Power Distribution Unit-16A High Voltage PDU (cord attached)	295363-002
Compaq Power Distribution Unit-16A High Voltage, 16A (detachable cord)	295363-B21
Compaq Power Distribution Unit-24A High Voltage	295363-003
Compaq Dual Input Power Distribution Unit-24A High Voltage	191186-001
Compaq High Voltage PDU Right Angled Cable Kit (IEC13-IEC14)	142257-004

Note: The 10-Amp AC cord which ships standard with the Compaq ProLiant DL580 utilizes a right angle plug on the server side (the side that plugs into the server) to avoid interference with the Cable Management Arm. Compaq High Voltage PDUs ship standard with 15-Amp AC cords that incorporate straight plugs on the server side. The optional Compaq High Voltage PDU Right Angled Cable Kit (142257-004) provides a right angle version of the 15-Amp AC cord. When deploying Compaq High Voltage PDUs with the Compaq ProLiant DL580, you may choose to simplify cable management at the rear of the server chassis by installing this option kit.

Server Console Switch 1 x 2 port (100 to 230 VAC)	120206-001
Server Console Switch 1 x 4 port (100 to 230 VAC)	400336-001
Server Console Switch 1 x 8 port (100 to 230 VAC)	400337-001
Server Console Switch 2 x 8 port (100 to 230 VAC)	400338-001
Server Console Switch 2 x 8 port (48 VDC)	400542-B21
CPU to Server Console Cable, 12'	110936-B21
CPU to Server Console Cable, 20'	110936-B22
CPU to Server Console Cable, 40'	110936-B23
CPU to Server Console Cable, 3'	110936-B24
CPU to Server Console Cable, 6'	110936-B25
CPU to Server Console Cable (Plenum Rated) 20'	149363-B21
CPU to Server Console Cable (Plenum Rated) 40'	149364-B21
Switch Box Connector Kit (115 V)	144007-001
Switch Box Connector Kit (230 V)	144007-002
Rack Internal Trackball Keyboard (Opal)	185152-406
1U Rack Keyboard Drawer	338056-B21
Keyboard/Monitor/Mouse extension cables	169989-001

Rack Options for Third Party Rack Cabinets

Depth Adjustable Fixed Rails	332558-B21
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Options

Service Upgrades (CarePacs)

Hardware Services 4-Hour On-site Service

4-Hour On-site Service, 5-Day x 9-Hour Coverage, 3 Years (2-5-2 Part Number for U.S.)	FM-MI4HR-36
4-Hour On-site Service, 5-Day x 9-Hour Coverage, 3 Years (2-5-2 Part Number for Canada)	FP-MI4HR-36
4-Hour On-site Service, 5-Day x 9-Hour Coverage, 3 Years (6-3 Part Number for U.S.)	401783-002
4-Hour On-site Service, 5-Day x 9-Hour Coverage, 3 Years (6-3 Part Number for Canada)	401783-122
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years (2-5-2 Part Number for U.S.)	FM-MI724-36
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years (2-5-2 Part Number for Canada)	FP-MI724-36
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years (6-3 Part Number for U.S.)	401782-002
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years (6-3 Part Number for Canada)	401782-122

Installation & Start-up Services

Hardware Installation (2-5-2 Part Number for U.S.)	FM-MIINS-IN
Hardware Installation (2-5-2 Part Number for Canada)	FP-MIINS-IN
Hardware Installation (6-3 Part Number for U.S.)	401793-002
Hardware Installation (6-3 Part Number for Canada)	401793-122
O/S & Hardware Installation (2-5-2 Part Number for U.S.) (Hardware installation plus two days O/S start-up activity (installation, configuration, network access & orientation.))	FP-CXHSI-03
O/S & Hardware Installation (6-3 Part Number for U.S.) (Hardware installation plus two days O/S start-up activity (installation, configuration, network access & orientation.))	160557-002

Business Solutions Priority Service Plan – Priority Level

5 x 9 4-hour H/W, 5 x 9 2-hour O/S (NT & NetWare), Three Years (2-5-2 Part Number for U.S.)	FP-CX103-36
5 x 9 4-hour H/W, 5 x 9 2-hour O/S (NT & NetWare), Three Years (2-5-2 Part Number for Canada)	FP-CZ103-36
5 x 9 4-hour H/W, 5 x 9 2-hour O/S (NT & NetWare), Three Years (6-3 Part Number for U.S.)	155325-002
5 x 9 4-hour H/W, 5 x 9 2-hour O/S (NT & NetWare), Three Years (6-3 Part Number for Canada)	155325-122

Business Solutions Priority Service Plan – Priority 24 Level

7 x 24 4-hour H/W, 7 x 24 2-hour O/S (NT & NetWare), Three years (2-5-2 Part Number for U.S.)	FP-CX203-36
7 x 24 4-hour H/W, 7 x 24 2-hour O/S (NT & NetWare), Three years (6-3 Part Number for U.S.)	155329-002

Business Solutions Priority Service Plan – Priority Plus Level

7 x 24 4-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS account review, Three Years (2-5-2 Part Number for U.S.)	FP-CX303-36
7 x 24 4-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS account review, Three Years (2-5-2 Part Number for Canada)	FP-CZ303-36
7 x 24 4-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS account review, Three Years (6-3 Part Number for U.S.)	155333-002
7 x 24 4-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS account review, Three Years (6-3 Part Number for Canada)	155333-122

Options

Service Upgrades (CarePacs) *(continued)*

Business Solutions Priority Service Plan – Priority Premier Level

7 x 24 2-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (2-5-2 Part Number for U.S.)	FP-CX503-36
7 x 24 2-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (2-5-2 Part Number for Canada)	FP-CZ503-36
7 x 24 2-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (6-3 Part Number for U.S.)	155337-002
7 x 24 2-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (6-3 Part Number for Canada)	155337-122

Business Solutions Priority Service Plan – Priority Executive Premier Level

7 x 24 2-hour H/W, 7 x 24 30-minute O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (2-5-2 Part Number for U.S.)	FP-CX703-36
7 x 24 2-hour H/W, 7 x 24 30-minute O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (2-5-2 Part Number for Canada)	FP-CZ703-36
7 x 24 2-hour H/W, 7 x 24 30-minute O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (6-3 Part Number for U.S.)	155341-002
7 x 24 2-hour H/W, 7 x 24 30-minute O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (6-3 Part Number for Canada)	155341-122

Note: For more information, customer/resellers can contact www.Compaq.com/services. Please note this web site is available in English only.

Memory

Compaq ProLiant DL580

STANDARD MEMORY

512-MB PC100-MHz Advanced ECC SDRAM DIMM installed (4 x 128-MB SDRAM DIMM)

Standard	Slot							
	1	2	3	4	5	6	7	8
512 MB	128 MB	128 MB	128 MB	128 MB	Empty	Empty	Empty	Empty
	9	10	11	12	13	14	15	16
	Empty	Empty	Empty	Empty	Empty	Empty	Empty	Empty

STANDARD MEMORY PLUS
OPTIONAL MEMORY

Up to 12,800-MB memory is available with the optional installation of PC100-MHz Advanced ECC SDRAM DIMM memory kits.

Up To	Slot							
	1	2	3	4	5	6	7	8
12,800 MB	128 MB	128 MB	128 MB	128 MB	1024 MB	1024 MB	1024 MB	1024 MB
	9	10	11	12	13	14	15	16
	1024 MB	1024 MB	1024 MB	1024 MB	1024 MB	1024 MB	1024 MB	1024 MB

STANDARD MEMORY REPLACED
WITH OPTIONAL MEMORY

Up to 16,384-MB of memory is available with the removal of the standard 512-MB of memory and the optional installation of PC100-MHz Advanced ECC SDRAM DIMM memory kits.

Up To	Slot							
	1	2	3	4	5	6	7	8
16,384 MB	1024 MB	1024 MB	1024 MB	1024 MB	1024 MB	1024 MB	1024 MB	1024 MB
	9	10	11	12	13	14	15	16
	1024 MB	1024 MB	1024 MB	1024 MB	1024 MB	1024 MB	1024 MB	1024 MB

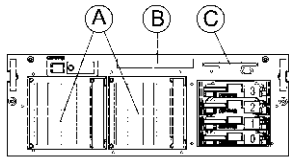
Note: Memory must be added in banks of four DIMMS. This chart does not represent all possible memory configurations.

Following memory options are available from Compaq:

- 4096-MB PC100-MHz Advanced ECC SDRAM Memory Option Kit (4 x 1024 MB) 189083-B21
- 2048-MB PC100-MHz Advanced ECC SDRAM Memory Option Kit (4 x 512 MB) 189082-B21
- 1024-MB PC100-MHz Advanced ECC SDRAM Memory Option Kit (4 x 256 MB) 189081-B21
- 512-MB PC100-MHz Advanced ECC SDRAM Memory Option Kit (4 x 128 MB) 189080-B21

Storage

DRIVE SUPPORT



Key:

- A Hot Plug Power Supplies
- B High Speed IDE CD-ROM
- C 1.44 MB Diskette Drive
- 0-3 Wide Ultra2/Ultra3 Drive Cage (4 x 1")

	Quantity Supported	Position Supported	Controller
Removable Media			
1.44-MB Diskette Drive	Up to 1	C	Integrated
IDE CD-ROM Drive	Up to 1	B	Integrated IDE
Hard Drives			
<i>Wide Ultra3 Hot Pluggable Drives</i>			
Note: Wide Ultra3 SCSI drives require the purchase and installation of Wide Ultra3 Controllers or Adapters to run at Wide Ultra3 speeds.			
<u>1-inch</u>	Up to 4	0-3	Integrated Smart Array Controller
36.4-GB 10,000 rpm			Smart Array 431 Controller
18.2-GB 10,000 rpm			Smart Array 3200 Controller
9.1-GB 10,000 rpm			Smart Array 4200 Controller
18.2-GB 15,000 rpm			Smart Array 5300 Controller
9.1-GB 15,000 rpm			64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
			64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter
<i>Wide Ultra2 Hot Pluggable Drives</i>			
<u>1-inch</u>	Up to 4	0-3	Integrated Smart Array Controller
18.2-GB			Smart Array 431 Controller
9.1-GB			Smart Array 3200 Controller
			Smart Array 4200 Controller
			Smart Array 5300 Controller
			64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
			64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter
External Storage			
StorageWorks Enclosure 4200/4300 Family (supports Ultra2/Ultra3 drives only)	Up to 10 (2 per channel SCSI controller)	External	Integrated Smart Array Controller
			Smart Array 431 Controller
			Smart Array 3200 Controller
			Smart Array 4200 Controller
			Smart Array 5300 Controller
			64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
			64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter
ProLiant Storage System Models UE ProLiant Storage System Models U2 (supports Wide-Ultra SCSI-3 drives only)	Up to 10 (2 per channel SCSI controller)	External	Smart Array 3200 Controller
			Smart Array 4200 Controller
			Smart Array 5300 Controller
			64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
			64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter
SCSI Storage Expander II	Up to 10 (2 per channel SCSI controller)	External	Smart Array 3200 Controller
			Smart Array 5300 Controller
			64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
			64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter
StorageWorks RAID Array 4100 Kit	Up to 11	External	Fibre Channel Host Adapter

Storage

DRIVE SUPPORT *(continued)*

Maximum Internal Hot Plug Storage Capacity – (SCSI Attached)

Internal	145.6 GB (4 x 36.4-GB Wide Ultra3 SCSI 1" Drives)
External	4.368 TB (10 ProLiant Storage Systems, each with 12 x 36.4-GB 1" hard drives)
Total	4.513 TB

Maximum Internal Hot Plug Storage Capacity – (External StorageWorks Enclosure Attached)

Internal	145.6 GB (4 x 36.4-GB Wide Ultra3 SCSI 1" Drives)
External	5.096 TB (10 StorageWorks Enclosures, each with 14 x 36.4-GB hard drives)
Total	5.241 TB

Maximum Storage Capacity – (External RAID Array 4100 Attached)

Internal	145.6 GB (4 x 36.4-GB Wide Ultra3 SCSI 1" Drives)
External	28.828 TB (6 PCI slots x 11 Raid Array 4000, each with 12 x 36.4-GB 1" hard drives)
Total	28.974 TB

QUICKSPECS

Compaq *ProLiant* DL580

Technical Specifications

System Unit

Dimensions (HxWxD) Overall (with front handles)	6.94 x 19 x 28.3 in/ 17.6 x 48.3 x 71.9 cm	
Chassis Footprint (HxWxD)	6.94 x 19 x 25 in/17.6 x 48.3 x 63.5 cm	
Weight No hard drives installed, one power supply	66 lbs/29.9 kg	
Input Requirements (per power supply) Rated Input Voltage Rated Input Frequency Input Power Rated Input Current	90 to 120 VAC/200 to 240 VAC 50 to 60 Hz 600W @ 110 VAC/600W @ 220 VAC 7A (90 VAC), 5A (120 VAC), 3A (210 VAC)	
BTU Rating	2291 BTU	
SCSI Connector	One 68-pin connector supporting Wide Ultra2 SCSI	
Power Supply Output Power (per power supply) Rated Steady-State Power Maximum Peak Power	Note: One Power Supply ships standard on 700-MHz Models. 450W/450W (lowline/highline) 480W/480W (lowline/highline)	
Temperature Range Operating Non-operating Shipping	50° to 95°F/10° to 35°C -20° to 140°F/-29° to 60°C -22° to 122°F/-30° to 50°C	
Relative Humidity (non-condensing) Operating Non-operating	20% to 80% 5% to 90%	
Maximum Wet Bulb Temperature	101.7°F/38.7°C	
Acoustic Noise	L_{wAd} (BELS)	L_{pAm} (dBA)
Idle (Fixed Disk Drives Spinning)	7.2	53
Operating (Random Seeks to Fixed Disks)	7.3	54

1.44-MB Diskette Drive

Diskette Size	3.5 in
LED Indicators (front panel)	Green
Read/Write Capacity per Diskette (high/low density)	1.44 MB/720 KB
Drive Supported	One
Drive Height	One-third
Drive Rotation	300 rpm
Transfer Rate (high/low)	500/250 Kb/s
Bytes/Sector	512
Sectors/Track (high/low)	18/9
Tracks/Side (high/low)	80/80
Access Times Track-to-Track (high/low) Average (high/low) Settling Time Latency Average	3/6 ms 169/94 ms 15 ms 100 ms
Cylinders (high/low)	80/80
Read/Write Heads	Two

QUICKSPECS

Compaq ProLiant DL580

Technical Specifications

Hot Plug

36.4 GB 10K	Capacity	36400 MB	Seek Time (typical reads, including settling)	
	Height	1 in/25.4 mm	Single Track	0.8 ms
	Width	3.5 in/88.9 mm	Average	5.2 ms
	Interface	Wide Ultra3 SCSI	Full-Stroke	12 ms
	Transfer Rate		Rotational Speed	10,000 rpm
	Synchronous (Maximum)	160 MB/s	Physical Configuration	
			Bytes/Sector	512
			Logical Blocks	71,132,000
			Operating Temperature	
			50° to 95°F/10° to 35°C	
18.2 GB 10K	Capacity	18209.3 MB	Seek Time (typical reads, including settling)	
	Height	1 in/25.4 mm	Single Track	0.8 ms
	Width	3.5 in/88.9 mm	Average	5.2 ms
	Interface	Wide Ultra3 SCSI	Full-Stroke	12 ms
	Transfer Rate		Rotational Speed	10,000 rpm
	Synchronous (Maximum)	160 MB/s	Physical Configuration	
			Bytes/Sector	512
			Logical Blocks	35,565,080
			Operating Temperature	
			50° to 95°F/10° to 35°C	
9.1 GB 10K	Capacity	9100.0 MB	Seek Time (typical reads, including settling)	
	Height	1 in/25.4 mm	Single Track	0.8 ms
	Width	3.5 in/88.9 mm	Average	5.0 ms
	Interface	Wide Ultra3 SCSI	Full-Stroke	12 ms
	Transfer Rate		Rotational Speed	10,000 rpm
	Synchronous (Maximum)	160 MB/s	Physical Configuration	
			Bytes/Sector	512
			Logical Blocks	17,773,524
			Operating Temperature	
			50° to 95°F/10° to 35°C	
18.2 GB 15K	Capacity	18209.3 MB	Seek Time (typical reads, including settling)	
	Height	1 in/25.4 mm	Single Track	0.8 ms
	Width	3.5 in/88.9 mm	Average	5.0 ms
	Interface	Wide Ultra3 SCSI	Full-Stroke	12 ms
	Transfer Rate		Rotational Speed	15,000 rpm
	Synchronous (Maximum)	160 MB/s	Physical Configuration	
			Bytes/Sector	512
			Logical Blocks	35,565,080
			Operating Temperature	
			50° to 95°F/10° to 35°C	
9.1 GB 15K	Capacity	9100.0 MB	Seek Time (typical reads, including settling)	
	Height	1 in/25.4 mm	Single Track	0.8 ms
	Width	3.5 in/88.9 mm	Average	5.0 ms
	Interface	Wide Ultra3 SCSI	Full-Stroke	12 ms
	Transfer Rate		Rotational Speed	15,000 rpm
	Synchronous (Maximum)	160 MB/s	Physical Configuration	
			Bytes/Sector	512
			Logical Blocks	17,773,524
			Operating Temperature	
			50° to 95°F/10° to 35°C	

QUICKSPECS

Compaq *ProLiant* DL580

Technical Specifications

Hot Plug
Wide Ultra2 SCSI
Hard Drives

18.2 GB	Capacity	18209.3 MB	Seek Time (typical reads, including settling)	
	Height	1 in/25.4 mm	Single Track	0.8 ms
	Width	3.5 in/88.9 mm	Average	7.0 ms
	Interface	Wide Ultra2 SCSI	Full-Stroke	15 ms
	Transfer Rate		Rotational Speed	7200 rpm
	Synchronous (Maximum)	80 MB/s	Physical Configuration	
			Bytes/Sector	512
			Logical Blocks	35,565,080
			Operating Temperature	
			50° to 95°F/10° to 35°C	
9.1 GB	Capacity	9100.0 MB	Seek Time (typical reads, including settling)	
	Height	1 in/25.4 mm	Single Track	0.8 ms
	Width	3.5 in/88.9 mm	Average	7.0 ms
	Interface	Wide Ultra2 SCSI	Full-Stroke	15 ms
	Transfer Rate		Rotational Speed	7200 rpm
	Synchronous (Maximum)	80 MB/s	Physical Configuration	
			Bytes/Sector	512
			Logical Blocks	17,773,524
			Operating Temperature	
			50° to 95°F/10° to 35°C	

Technical Specifications

24X Max (or higher) IDE
CD-ROM Drive Slim Line

Disk	
Applicable Disk	CD-ROM (Mode 1 and 2) CD-DA, CD-XA (Mode 2, Form 1 and 2) Photo CD (Single and Multi-session) Mixed Mode (Audio and Data combined)
Capacity	550 MB (Mode 1, 12 cm) 640 MB (Mode 2, 12 cm)
Diameter	4.7 in, 3.15 in/12 cm, 8 cm
Rotational Speed	4200 rpm maximum
Center Hole	0.6 in/15 mm diameter
Thickness	1.2 mm
Track Pitch	1.6 μ m
Block Size	
Mode 1	2,048
Mode 2	2,340, 2,336, 1,024 bytes
CD-DA	2,352 bytes
CD-XA	2,328 bytes
Interface	IDE (ATAPI)
Access Times (typical)	
Random	100 ms
Full-Stroke	200 ms
Audio Output Level	
Line-out	0.7 VRMS at 47 kOhms
Headphone	0.6 VRMS at 32 Ohms (maximum volume)
Data Transfer Rate	
Sustained	150 KB/s (single)
Burst	2100 to 3600 KB/s
Cache Buffer	128 KB
Start-up Time (typical)	< 7 seconds
Stop Time	< 4 seconds
Laser Parameters	
Type	Semiconductor Laser GaAlAs
Wave Length	780 \pm 25 nm
Divergence Angle	53.5° \pm 1.5°
Output Power	0.14 mW
Operating Conditions	
Temperature	41° to 113°F/5° to 45°C
Humidity	10% to 80%
Dimensions	
(HxWxD, maximum)	1.69 x 5.75 x 8.19 in/4.29 x 15 x 20.8 cm
Weight	2.66 lbs/1.2 kg

Technical Specifications

Integrated Smart Array Controller

Data Compatible with all Smart Array Controllers	Yes
Instant Upgrades to other Smart Array Controllers	Yes
Consistent Software Manageability Tools	Yes
PCI Bus	32-bit, 33 MHz (integrated on server board)
PCI Peak Data Transfer Rate	133 MB/s
SCSI Protocols Supported	Ultra2, Wide-Ultra
SCSI Peak Data Transfer Rate	80 MB/s
Note: For ProLiant servers having TWO internal drive bays on separate SCSI ports: SCSI Peak Data Transfer Rate is 160 MB/s total; 80 MB/s per channel and Channels is 2.	
Channels	1
Note: For ProLiant servers having TWO internal drive bays on separate SCSI ports: SCSI Peak Data Transfer Rate is 160 MB/s total; 80 MB/s per channel and Channels is 2.	
SCSI Ports (external/internal)	0/1
Note: For ProLiant servers having TWO internal drive bays on separate SCSI ports: SCSI Peak Data Transfer Rate is 160 MB/s total; 80 MB/s per channel and Channels is 2.	
Drives Supported (maximum)	Maximum = total number of internal drives
Note: Maximum is the total number of internal drives on each specific ProLiant server.	
Cache	8-MB read only
RAID Support	0, 1, 0+1, 5
Logical Drives (maximum)	32
Online Configuration	Yes
Online Capacity Expansion	Yes
Logical Drive Capacity Extension	Yes
Online Stripe Size Migration	Yes
Online RAID Level Migration	Yes
Online Spare Support	Yes
Automatic Data Recovery	Yes
Drive Roaming	Yes
Redundant Controllers	No

QUICKSPECS

Compaq *ProLiant* DL580

Technical Specifications

Compaq NC3134
Fast Ethernet NIC 64 PCI
Dual Port 10/100

Network Interface	10Base-T/100Base-TX
Compatibility	PCI v2.2, IEEE 802.3/802.3u compliant
Data Transfer Method	64-Bit/66MHz bus-master PCI
Network Transfer Rate	
10Base-T (Half-Duplex), 10Base-2	10 Mb/s
10Base-T (Full-Duplex)	20 Mb/s
100Base-TX (Half-Duplex)	100 Mb/s
100Base-TX (Full-Duplex)	200 Mb/s
Connector	Dual RJ-45
I/O Address and Interrupt	Automatic Configuration
Cable Support	
10Base-T/100Base-TX	Categories 3, 4 or 5 UTP (2 or 4 pair); up to 328 feet (100 meters)
	Category 5 UTP (2 pair); up to 328 feet (100 meters)

Smart Array 431
Controller

Data Compatible with all Smart Array Controllers	Yes
Instant Upgrades to other Smart Array Controllers	Yes
Consistent Software Manageability Tools	Yes
PCI Bus	64-bit, 66MHz
PCI Peak Data Transfer Rate	533 MB/s
SCSI Protocols Supported	Ultra3, Ultra2, Wide-Ultra
SCSI Peak Data Transfer Rate	160 MB/s
Channels	1
SCSI Ports (external/internal)	1/1
Drives Supported (maximum)	14
Note: Drives Supported (maximum) is based on use of Compaq StorageWorks Enclosure 4200/4300 family (14 hard disk drive enclosure).	
Cache	16-MB cache engine
RAID Support	0, 1, 0+1 5
Logical Drives (maximum)	32
Online Configuration	Yes
Online Capacity Expansion	Yes
Logical Drive Capacity Extension	Yes
Online Stripe Size Migration	Yes
Online RAID Level Migration	Yes
Online Spare Support	Yes
Automatic Data Recovery	Yes
Drive Roaming	Yes
Redundant Controllers	No

Technical Specifications

Smart Array 3200 Controller

Data Compatible with all Smart Array Controllers	Yes
Instant Upgrades to other Smart Array Controllers	Yes
Consistent Software Manageability Tools	Yes
PCI Bus	32-bit, 33 MHz
PCI Peak Data Transfer Rate	133 MB/s
SCSI Protocols Supported	Ultra2, Wide-Ultra
SCSI Peak Data Transfer Rate	160 MB/s total, 80 MB/s per channel
Channels	2
SCSI Ports (external/internal)	2/2
Drives Supported (maximum)	28
Note: Drives Supported (maximum) is based on use of Compaq StorageWorks Enclosure 4200/4300 family (14 hard disk drive enclosure).	
Cache	64-MB battery backed read-write
RAID Support	0, 1, 0+1, 4, 5
Logical Drives (maximum)	32
Online Configuration	Yes
Online Capacity Expansion	Yes
Logical Drive Capacity Extension	Yes
Online Stripe Size Migration	Yes
Online RAID Level Migration	Yes
Online Spare Support	Yes
Automatic Data Recovery	Yes
Drive Roaming	Yes
Redundant Controllers	No

Technical Specifications

Smart Array 4200 Controller

Data Compatible with all Smart Array Controllers	Yes
Instant Upgrades to other Smart Array Controllers	Yes
Consistent Software Manageability Tools	Yes
PCI Bus	64-bit, 33 MHz
PCI Peak Data Transfer Rate	266 MB/s
SCSI Protocols Supported	Ultra2, Wide-Ultra
SCSI Peak Data Transfer Rate	320 MB/s total, 80 MB/s per channel
Channels	4
SCSI Ports (external/internal)	4/2
Drives Supported (maximum)	56
Note: Drives Supported (maximum) is based on use of Compaq StorageWorks Enclosure 4200/4300 family (14 hard disk drive enclosure).	
Cache	64-MB battery backed read-write
RAID Support	0, 1, 0+1, 5
Logical Drives (maximum)	32
Online Configuration	Yes
Online Capacity Expansion	Yes
Logical Drive Capacity Extension	Yes
Online Stripe Size Migration	Yes
Online RAID Level Migration	Yes
Online Spare Support	Yes
Automatic Data Recovery	Yes
Drive Roaming	Yes
Redundant Controllers	No

Smart Array 5300 Controller

Technical Specifications

Data Compatible with all Smart Array Controllers	Yes
Instant Upgrades to other Smart Array Controllers	Yes
Consistent Software Manageability Tools	Yes
PCI Bus	64-bit, 66MHz
PCI Peak Data Transfer Rate	533 MB/s
SCSI Protocols Supported	Ultra3, Ultra2, Wide-Ultra
SCSI Peak Data Transfer Rate	640 MB/s total, 160 MB/s per channel
Channels	2, 4
SCSI Ports (external/internal)	2 channel model: 2/2 4 channel model: 4/2
Drives Supported (maximum)	56
Note: Drives Supported (maximum) is based on use of Compaq StorageWorks Enclosure 4200 family. (14 hard disk drive enclosure)	
Cache	128, 64 or 32 MB battery backed read-write
RAID Support	0, 1, 0+1, 5, Advanced Data Guarding
Note: RAID ADG will be supported in the near future. For customers who have purchased the SA-5304/128 a quick firmware upgrades to enable the technology will be available from www.compaq.com/smartarray . The 128-MB cache module with RAID ADG will also be supported in the near future. Please note this web site is available in English only.	
Note: RAID Support: Advanced Data Guarding (RAID ADG) is available with 128-MB versions of the SA-5300 only.	
Logical Drives (maximum)	32
Online Configuration	Yes
Online Capacity Expansion	Yes
Logical Drive Capacity Extension	Yes
Online Stripe Size Migration	Yes
Online RAID Level Migration	Yes
Online Spare Support	Yes
Automatic Data Recovery	Yes
Drive Roaming	Yes
Redundant Controllers	No

Technical Specifications

64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter

Drives Supported	Up to 28 SCSI devices (14 per channel)
Maximum Transfer Rate per PCI Bus (peak)	532 MB/s per channel
SCSI Protocols	Wide Ultra3 SCSI Wide Ultra2 SCSI Wide-Ultra SCSI-3 Fast SCSI-2
Electrical Protocol	Low Voltage Differential (LVD)
SCSI Termination	Active Termination
External SCSI Connectors	Two 68-pin VHDCI connectors
Internal SCSI Connectors	Two 68-pin Wide-Ultra SCSI-3 connectors One 50-pin Narrow Ultra connector

64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter

Drives Supported	Up to 14 SCSI devices
Storage Capacity	254.8 GB
Data Transfer Method	64-bit/66-MHz PCI bus-master
Maximum SCSI Channel Transfer Rate	160 MB/s per channel
Maximum Transfer Rate per PCI Bus (peak)	532 MB/s per channel
SCSI Protocols	Wide Ultra3 SCSI Wide Ultra2 SCSI Wide-Ultra SCSI-3 Fast-Wide SCSI-2 Fast SCSI-2
Electrical Protocol	Low Voltage Differential (LVD)
SCSI Termination	Active Termination
External SCSI Connectors	One 68-pin Wide-Ultra SCSI-3 connector
Internal SCSI Connectors	Two 68-pin Wide-Ultra SCSI-3 connectors (one LVD and one SE) One 50-pin Narrow Ultra connector

QUICKSPECS

Compaq *ProLiant* DL580

Technical Specifications

Compaq Rack 9142 (42U)
(optional)

Dimensions	Total Cabinet	Shipping	Color
Height	78.7 in/2,000 mm	83.38 in/2,168.65 mm	
Depth	35.8 in/909 mm	48 in/1219.2 mm	Opal
Width	23.7 in/603 mm	32 in/812.8 mm	
Weight	253 lbs/114.84 kg	325 lbs/147.52 kg	

Compaq Rack 9136 (36U)
(optional)

Dimensions	Total Cabinet	Shipping	Color
Height	68.6 in/1,742 mm	75.25 in/1,911.35 mm	
Depth	35.8 in/909 mm	48 in/1,219.2 mm	Opal
Width	23.7 in/603 mm	32 in/812.8 mm	
Weight	165 lbs/75 kg	234 lbs/106 kg	

Compaq Rack 9122 (22U)
(optional)

Dimensions	Total Cabinet	Shipping	Color
Height	43 in/1,092 mm	52.25 in/1,327.15 mm	
Depth	35.8 in/909 mm	48 in/1,219.2 mm	Opal
Width	24 in/610 mm	32 in/812.8 mm	
Weight	176 lbs/79.89 kg	225 lbs/102.13 kg	